



### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

**“जानने का अधिकार, जीने का अधिकार”**

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

**“पुराने को छोड़ नये के तरफ”**

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8527 (1977): Tweezers, Extraction, Dental [MHD 8 : Dentistry]

**“ज्ञान से एक नये भारत का निर्माण”**

Satyanaaranay Gangaram Pitroda

Invent a New India Using Knowledge



**“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”**

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”





BLANK PAGE



PROTECTED BY COPYRIGHT

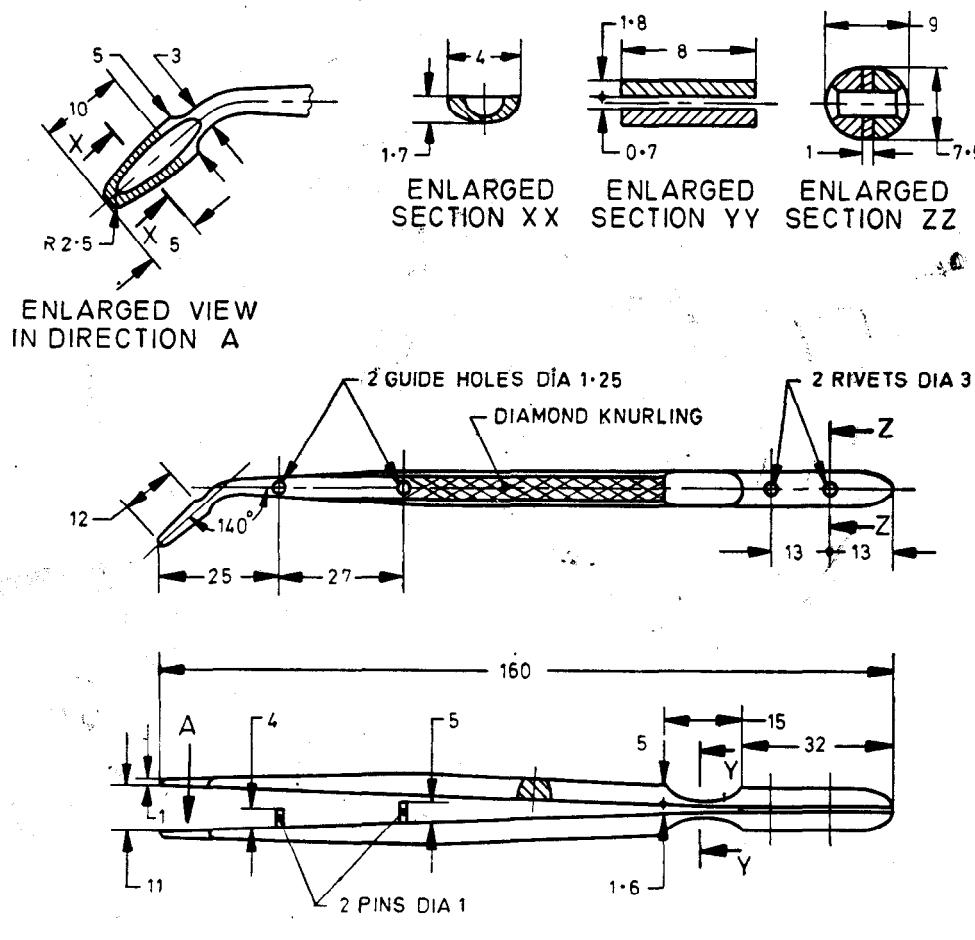


Indian Standard

# SPECIFICATION FOR TWEEZERS, EXTRACTION, DENTAL

**1. Scope** — Dimensions and other requirements for extraction tweezers used in dentistry.

**2. Shape and Dimensions** — As shown in Fig. 1.



All dimensions in millimetres.

FIG. 1 TWEEZERS, EXTRACTION, DENTAL

**2.1 Joint** — Block joint or semi-block joint as in 5 of Section 2 of IS:3642-1966 'General requirements for surgical instruments'.

**2.2 Serrations** — Transverse that is perpendicular to the axis of the jaws at the extraction jaws and diamond knurling on the outside surface for good grip.

**2.3** A deviation of  $\pm 2.5$  percent shall be allowed on all dimensions.

**3. Material** — Stainless steel conforming to Designation 20Cr13 or 30Cr13 of IS:6603-1972 'Specification for stainless steel bars and flats'.

## 4. Workmanship and Finish

**4.1** Tweezers shall be symmetrical. On closure of the arms the tips or the serrations shall meet accurately and the engagement shall commence at the extreme end and progress along the entire length of the tip. On pressing the arms further, the tips shall have no tendency to gape.

**4.2** There shall be no side play of the arms.

**4.3** The arms shall be finished smooth, free from burrs, pits, cracks and other surface defects and shall have no sharp edges.

**4.4** The serrations shall be clean.

**4.5** The tweezers shall be polished bright and passivated.

**5. Heat Treatment** — The tweezers shall be uniformly hardened and tempered to a hardness of 370 to 410 HV.

## **6. Tests**

**6.1 Practical** — The tweezers shall be used to pick up one strand at a time of teased cotton wool from a polished surface. The tweezers shall do this easily.

**6.2 Flexibility** — The tweezers shall be tested for flexibility as given in **6.2.1** to **6.2.3**.

**6.2.1** The arms of the tweezers shall be made to close to a maximum by manual compression. On release of the force, no permanent set shall be observed and the tweezers shall satisfy the requirements of **4.1**.

**6.2.2** The jaws of the tweezers shall be made to close on a piece of firm vulcanized rubber, 3 mm thick, and maximum thumb and finger pressure applied on opposite arms 25 mm away from the tips of the jaws. On release of the force, the tweezers shall show no sign of damage.

**6.2.3** The joint end of the tweezers shall be fixed in a vice so that 135-mm portion of the tweezers protrudes above the surface of the vice. By the application of force at the bend of the jaw, one arm shall be deflected in a plane right angle to its own by 25 mm as measured at the tip of the jaw. On release of the force, no permanent set shall be observed.

**6.3 Corrosion Resistance** — Test the tweezers in accordance with IS : 7531-1975 'Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments'. It shall show no sign of corrosion after the test.

**7. Marking** — The tweezers shall be legibly and indelibly marked with the manufacturer's name, initials or recognized trade-mark, and the country of manufacture.

**7.1 ISI Certification Marking** — Details available with the Indian Standards Institution.

**8. Packing** — The tips of the tweezers shall be preserved by hot dipping individually in plastipeel. The tweezers shall either be wrapped in wax paper or put in a polyethylene bag, and then packed in cartons in accordance with trade practice. The cartons shall bear the name of tweezers, manufacturer's name, initials or registered trade-mark and the country of manufacture.

**8.1** The packing may also be done as agreed to between the purchaser and the supplier.